I/We Claim:

1. A method for dynamically simulating weather in a computer game, comprising:

starting a game play portion of the computer game;

receiving meteorological conditions for a specified geographic area;

altering cloud formations based on the received meteorological conditions; and

repeating the receiving and altering steps in intervals during the game play portion of the computer game.

2. The method of claim 1, wherein the interval in which the receiving step is performed is different than the interval in which the altering step is performed.

3. The method of claim 1, wherein the receiving step comprises receiving temperature data and dew point data for the specified geographic area from a database over the Internet, and wherein the altering step comprises altering cloud formations based on the received temperature data and dew point data.

4. The method of claim 1, wherein the computer game comprises a flight simulation game.

5. The method of claim 1, wherein the altering step further comprises:

determining whether clouds should form and, if so, rendering a layer of clouds; and

determining whether clouds should dissipate and, if so, dissipating a layer of rendered clouds.

6. The method of claim 5, wherein the determining steps are performed separately for each cell in a geographic grid substantially centered around a current user position.

7. The method of claim 5, wherein rendering a layer of clouds further comprises:

determining a cloud coverage; and

rendering clouds corresponding to the determined cloud coverage.

8.   The method of claim 5, wherein dissipating a layer of clouds further comprises:

gradually increasing a transparency level at edges of each cloud in the cloud layer; and

iteratively increasing a transparency level closer to a center of each cloud as the farther out portions of the cloud fades from view due to its increased transparency level.

9.   A method for altering cloud formations in a computer game, comprising:

determining a temperature and a dew point;

generating a random number and, when the random number is within a determined probability of cloud formation based at least in part on a spread of the temperature and dew point, rendering a cloud on a display screen during a game play mode of the computer game.

10.   The method of claim 9, further comprising:

generating a random number and, when the random number is within a determined probability of cloud dissipation based at least in part on the spread of the temperature and dew point, dissipating a rendered cloud on the display screen during a game play mode of the computer game.

11.   The method of claim 10, further comprising repeating the determining and generating steps for each cell in a geographical grid substantially centered around a user's current position in a simulated environment of the computer game.

12.   The method of claim 9, wherein determining the temperature and dew point comprises:

receiving the temperature and dew point at intervals from a database over the Internet;

altering the temperature and dew point between the intervals based at least in part on a position of a sun in the simulated environment being simulated by the computer game; and

returning the altered temperature over a predetermined period of time to the temperature and dew point received at the next interval.

13.   The method of claim 12, wherein the altering step is further based at least in part on a user weather setting.

14.   The method of claim 9, wherein rendering a cloud further comprises:

determining a cloud base altitude based at least in part on the spread of the temperature and dew point; and

determining a cloud type based at least in part on an atmospheric pressure.

15.   The method of claim 10, wherein dissipating a rendered cloud further comprises:

gradually increasing a transparency level at edges of the cloud; and

iteratively increasing a transparency level closer to a center of the cloud as the farther out portions of the cloud fade from view due to its increased transparency level.

16.   The method of claim 13, wherein the user weather setting comprises a multiplier.

17.   A computer implemented method for dissipating a rendered cloud in a virtual world simulated in a computer game, comprising:

gradually increasing a transparency level at edges of the cloud; and

iteratively increasing a transparency level closer to a center of the cloud as farther out portions of the cloud fade from view due to their increased transparency level.

18.   The computer implemented method of claim 17, wherein the cloud is comprised of sprites,

wherein gradually increasing the transparency level at edges of the cloud comprises increasing a transparency level of sprites located at the edges of the cloud, and

wherein iteratively increasing the transparency level closer to the center of the cloud as the farther out portions of the cloud fade from view due to its increased transparency level comprises iteratively increasing a transparency of sprites closer to the center of the cloud as sprites located farther from the center of the cloud fade from view.

19.   A computer implemented method for rendering clouds in a simulated environment during a game play portion of a computer game, comprising rendering clouds based at least in part on actual temperature and dew point data, corresponding to a user's current geographical position in a simulated environment, received during the game play portion of the computer game.

20.   A computer-implemented method for simulating weather in a computer game, comprising:

dividing a simulated geographic environment into a plurality of areas; and

simultaneously depicting on a display simulated weather conditions for each of a first and second area that are visible from a user's simulated position in the simulated geographic environment, wherein the depiction of the simulated weather conditions for the first area is different that the depiction of the simulated weather conditions for the second area.

21.   The computer implemented method of claim 20, wherein the first and second simulated weather conditions comprise weather of differing cloud coverage levels.

22.   The computer implemented method of claim 20, further comprising revising the simulated weather conditions for the first area while maintaining the simulated weather conditions for the second area.

23.   The computer implemented method of claim 20, wherein the plurality of areas comprises at least nine areas.

24.   The computer implemented method of claim 20, wherein the plurality of areas comprise a geographic area within a visible distance of the user's simulated position in the simulated geographic environment.

25.   A computer implemented method for simulating weather in a computer game, comprising graphically depicting clouds based at least in part on temperature data.

26.   A computer implemented method for simulating weather in a computer game, comprising graphically depicting clouds based at least in part on dew point data.